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EXAMINER

DUNWOODY, AARON M

ART UNIT PAPER NUMBER

3679

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/611,676

Applicant(s)

TROUYET, REMI

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/1/2003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) filed 10/01/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 51, 50. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 1 and 2 are objected to because of the following informalities:

Regarding claims 1 and 12, the phrase "of the type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "of the type"), thereby rendering the scope of the claim(s) unascertainable. Appropriate correction is required.

Claims 1 and 10 are objected to because of the following informalities:

Claim 1 change from "pressurised" to "pressurized" for clarity.

Claim 10 change from "the said" to "said" for clarity.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 5518332, Katoh.

In regards to claim 1, Katoh discloses a feed pipe coupling for a pressurized fluid system, in which a connector includes a head (4) which is adapted to be received axially in a body of a feed inlet (2), and in which the connector is arranged to be locked in a forward position in which it is engaged axially in the body of the feed inlet by at least one locking spring clip (3) having a generally U-shaped form comprising two branches which are generally parallel to each other and oriented generally transversely, at right angles to the axis, together with a central connecting branch, wherein at least one of the transverse branches includes a locking portion which is received at least partly in a radial groove (12) in the head of the connector, wherein the branch of the spring clip that has the locking portion is configured in the general form of a hairpin and includes a radially internal, locking, first branch portion, of which the locking portion is a pad, together with a radially external, connecting, second branch portion which is connected at each of its ends, firstly to the operational locking branch portion through a bent

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connecting portion, and secondly, to the central connecting branch of the spring clip, whereby to confer on the locking branch a capacity for elastic deformation in the general transverse plane of the spring clip.

In regards to claim 2, Katoh discloses the spring clip having a general symmetry of design with relation to a bisecting axial plane which is at right angles to the general plane of the spring clip.

In regards to claim 3, Katoh discloses unlocking between the connector and body, with a view to permitting at least partial rearward axial disengagement of the connector out of the body, being obtained by elastic deformation of the branches of the spring clip resulting from mating cooperation between at least a pad of the locking branch portion of each branch and at least a portion of the body, under the action of a release force which is applied in a transverse direction on the central connecting branch of the spring clip.

In regards to claim 4, Katoh discloses the elastic deformation of the branches of the spring clip causes radial outward displacement of the locking branch portion in a direction substantially at right angles to the said branch portion.

In regards to claim 5, Katoh discloses the transverse release force exerted on the central connecting branch being a tractive force.

In regards to claim 6, Katoh discloses the transverse release force exerted on the central connecting portion being a thrust force.

In regards to claim 7, Katoh discloses the body including, in facing relationship with the central connecting branch stop means for limiting the displacement of the spring clip during application of the transverse release force.

In regards to claim 9, Katoh discloses the spring clip being mounted on the body, in such a way that it cannot be lost, by means of stop means included in the body, which cooperate with the free end of at least one of the locking branch portions.

In regards to claim 10, Katoh discloses the body having a seating, the abutment base of which lies facing the free end of the locking branch portion, the seating being open laterally for engagement of the end in the seating during fitting of the spring clip on the body.

In regards to claim 11, Katoh discloses the seating being formed in a portion which projects with respect to the outer surface of the body, whereby to permit access to the free end of the locking branch portion for its extraction out of the seating with a view to taking out the spring clip, in particular with the aid of a tool.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 3753582, Graham.

In regards to claim 1, Graham discloses a feed pipe coupling for a pressurized fluid system, in which a connector includes a head (2) which is adapted to be received axially in a body of a feed inlet (1), and in which the connector is arranged to be locked in a forward position in which it is engaged axially in the body of the feed inlet by at least one locking spring clip (3) having a generally U-shaped form comprising two branches

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which are generally parallel to each other and oriented generally transversely, at right angles to the axis, together with a central connecting branch, wherein at least one of the transverse branches includes a locking portion which is received at least partly in a radial groove (6) in the head of the connector, wherein the branch of the spring clip that has the locking portion is configured in the general form of a hairpin and includes a radially internal, locking, first branch portion, of, which the locking portion is a pad, together with a radially external, connecting, second branch portion which is connected at each of its ends, firstly to the operational locking branch portion through a bent connecting portion, and secondly, to the central connecting branch of the spring clip, whereby to confer on the locking branch a capacity for elastic deformation in the general transverse plane of the spring clip.

In regards to claim 2, Graham discloses the spring clip having a general symmetry of design with relation to a bisecting axial plane which is at right angles to the general plane of the spring clip.

In regards to claim 3, Graham discloses unlocking between the connector and body, with a view to permitting at least partial rearward axial disengagement of the connector out of the body, being obtained by elastic deformation of the branches of the spring clip resulting from mating cooperation between at least a pad of the locking branch portion of each branch and at least a portion of the body, under the action of a release force which is applied in a transverse direction on the central connecting branch of the spring clip.

In regards to claim 4, Graham discloses the elastic deformation of the branches of the spring clip causes radial outward displacement of the locking branch portion in a direction substantially at right angles to the said branch portion.

In regards to claim 5, Graham discloses the transverse release force exerted on the central connecting branch being a tractive force.

In regards to claim 6, Graham discloses the transverse release force exerted on the central connecting portion being a thrust force.

In regards to claim 7, Graham discloses the body including, in facing relationship with the central connecting branch stop means for limiting the displacement of the spring clip during application of the transverse release force.

In regards to claim 8, Graham discloses the locking portion being configured generally as an arc of a circle, the concavity of which is oriented towards the axis in such a way as to cooperate with a frustoconical portion of the head of the connector during its axial introduction into the body.

In regards to claim 9, Graham discloses the spring clip being mounted on the body, in such a way that it cannot be lost, by means of stop means included in the body, which cooperate with the free end of at least one of the locking branch portions.

In regards to claim 10, Graham discloses the body having a seating, the abutment base of which lies facing the free end of the locking branch portion, the seating being open laterally for engagement of the end in the seating during fitting of the spring clip on the body.



In regards to claim 11, Graham discloses the seating being formed in a portion which projects with respect to the outer surface of the body, whereby to permit access to the free end of the locking branch portion for its extraction out of the seating with a view to taking out the spring clip, in particular with the aid of a tool.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh in view of US patent 3314696, Ferguson et al.

In regards to claim 8, Katoh discloses the claimed invention except for the locking portion being configured generally as an arc of a circle, the concavity of which is oriented towards the axis in such a way as to cooperate with a frustoconical portion of the head of the connector during its axial introduction into the body. Ferguson et al teaches a locking portion (83, 84) being configured generally as an arc of a circle, the concavity of which is oriented towards the axis in such a way as to cooperate with a frustoconical portion of the head of the connector during its axial introduction into the body, to generally conform to the a frustoconical portion of the head of a connector (col. 5, line 74 through col. 6, line 10). As Ferguson et al relates to quick connect couplings of the type which includes a tubular receptacle and a tubular plug adapted to be quickly interlocked in the tubular receptacle without requiring the use of any tools, it would have

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been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the locking portion generally as an arc of a circle, the concavity of which is oriented towards the axis in such a way as to cooperate with a frustoconical portion of the head of the connector during its axial introduction into the body, to generally conform to the a frustoconical portion of the head of a connector, as taught by Ferguson et al.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh in view of FR 2820489 A.

In regards to claim 12, Katoh discloses the claimed invention except for the body of the feed inlet including a purging pod. FR 2820489 A teaches a purging pod (32) "for flushing the system" (abstract). As FR 2820489 A relates to a connection device comprising a coupling with a head, received axially in a feed inlet of a receiver body, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the body of the feed inlet with a purging pod for flushing the system, as taught by FR2820489 A

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh in view of FR 2820489 A.

In regards to claim 12, Graham discloses the claimed invention except for the body of the feed inlet including a purging pod. FR 2820489 A teaches a purging pod (32) "for flushing the system" (abstract). As FR 2820489 A relates to a connection

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device comprising a coupling with a head, received axially in a feed inlet of a receiver body, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the body of the feed inlet with a purging pod for flushing the system, as taught by FR2820489 A.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because it illustrates the inventive concept of the invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dan P Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

.amd



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